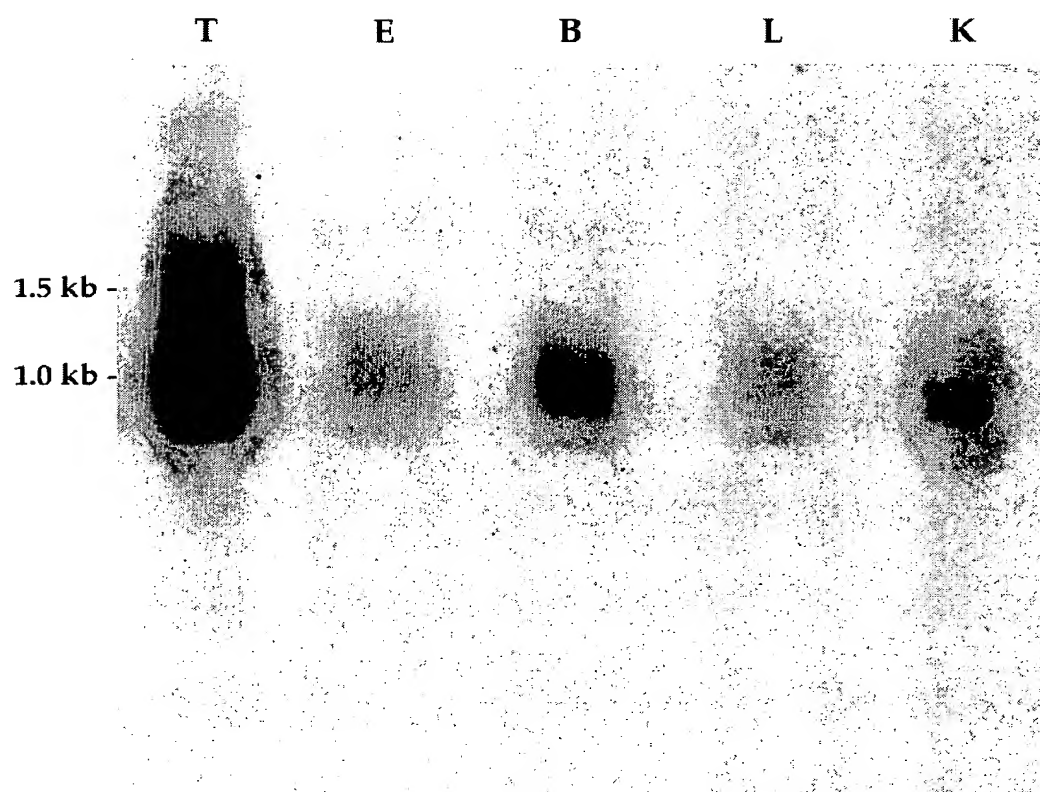




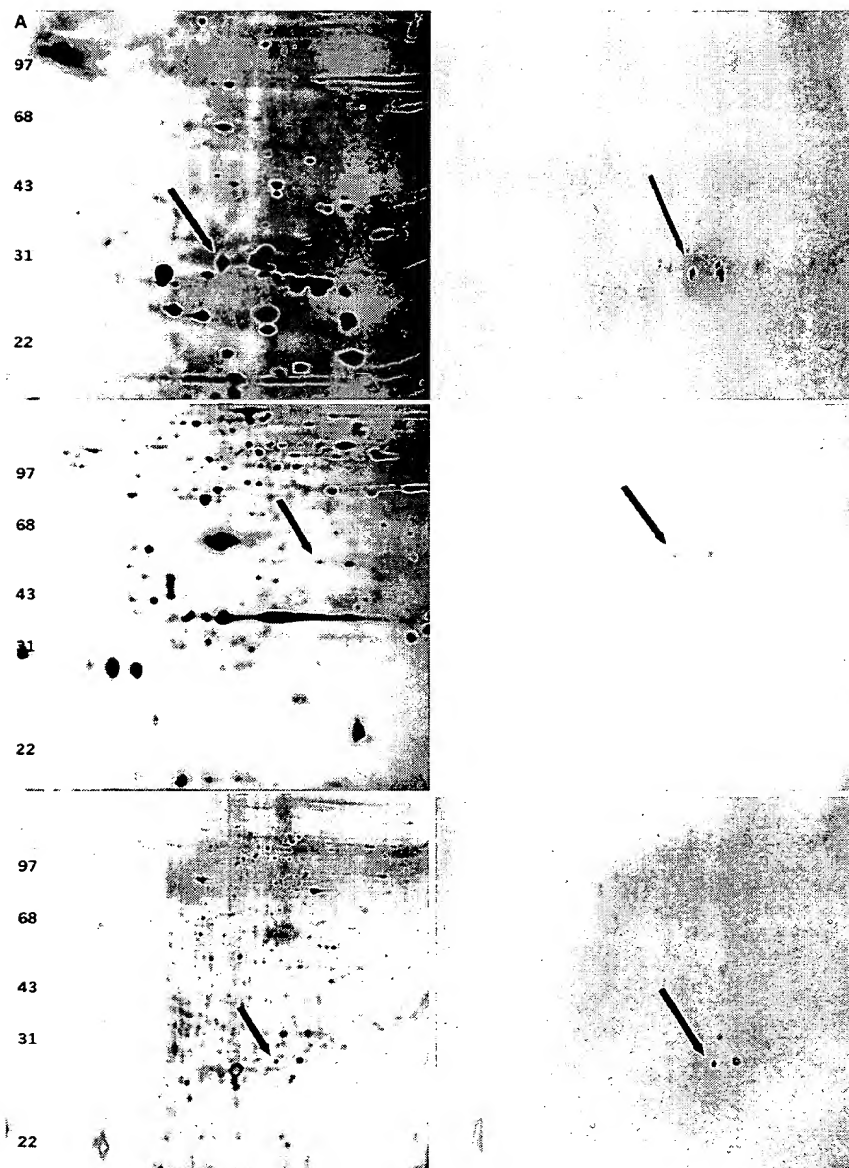
FIG. 2

1 A gctgtgcagagccgtctggcaggggtgacctcctaaagggatattccatctttattaatcattag 65  
 66 A tagtgtgggtcagagacttagcaccattgggtctcccccaacctgggtccagacatttcagcagttta 130  
 131 A tcggaacagcaacaacagcaacaaaaccttcaaaatttacaagtcctttaagaaatagaaATGgca 195  
 B tggcttcgcgtgggtggaggaggcgcggtgcaggtcctttaagaaatagaaATGgca  
 C ttgaacctATGttgcactgttgaagttctccacttacacaqcctattttatggca  
 1 M L H C G V L H L H S L F M A 15  
 196 tccaaaagagctctgggtcatcctagccaaaggagcagaggagatggagacagtgattcctgtgga 260  
 16 S K R A L V I L A K G A E E M E T V I P V D 37  
 261 catcatgcggcgagctgggattaaagtcaaccgttgcaggtctgggtgggaaggacccccgtgcagt 325  
 38 I M R R A G I K V T V A G L A G K D P V O 58  
 Peptide 1  
 326 gtagccgtgatgtagtgatttgtccggataccagtctggaagaagcaaaaacacagggaccatac 390  
 59 C S R D V V I C P D T S L E E A K T Q G P Y 80  
 391 gatgtggttgttcttccaggaggaaatctgggtgcacagaacttatctgagtcggcttttggtgaa 455  
 81 D V V V L P G G N L G A Q N L S E S A L V K 102  
 456 ggagatcctcaaggagcaggagaacaggaagggcctcatagctgccatctgtgcgggtcctacgg 520  
 103 E I L K E Q E N R K G L I A A I C A G P T 123  
 Peptide 2  
 \*  
 521 ccctgctgggtcaagagtaggctttggatgcaaggttacatcgcaaccattggctaaggacaaa 585  
 124 A L L A H E V G F G C K V T S H P L A K D K 145  
 Peptide 3  
 586 atgatgaacggcagtcactacagctactcagagagccgtgtggagaaggacggcctcactcctcac 650  
 146 M M N G S H Y S Y S E S R V E K D G L I L T 167  
 Peptide 4  
 651 cagccgtgggcctgggaccagcttcgagtttgcgctggccattgtggaggcactcagtggcaagg 715  
 168 S R G P G T S F E F A L A I V E A L S G K 188  
 716 acatggctaaccaagtgaaggccccgcttgttctcaaagacTAGagagcccaagccctggaccct 780  
 189 D M A N Q V K A P L V L K D \* 202  
 781 ggacccccaggctgagcaggcattggaagcccactagagagaccacagcccagtgaacctggcat 845  
 846 tggaagcccactagtgtgtccacagcccagtgaacctcaggaactaacgtgtgaagtagcccgct 910  
 911 gctcaggaatctcgccttggtctgtactattctgagccttgctagtagaataaacagttcccca 975  
 976 agctc\*c\*tgacggct\* 989

**Fig. 3**



**Fig. 4**



**Fig. 5**

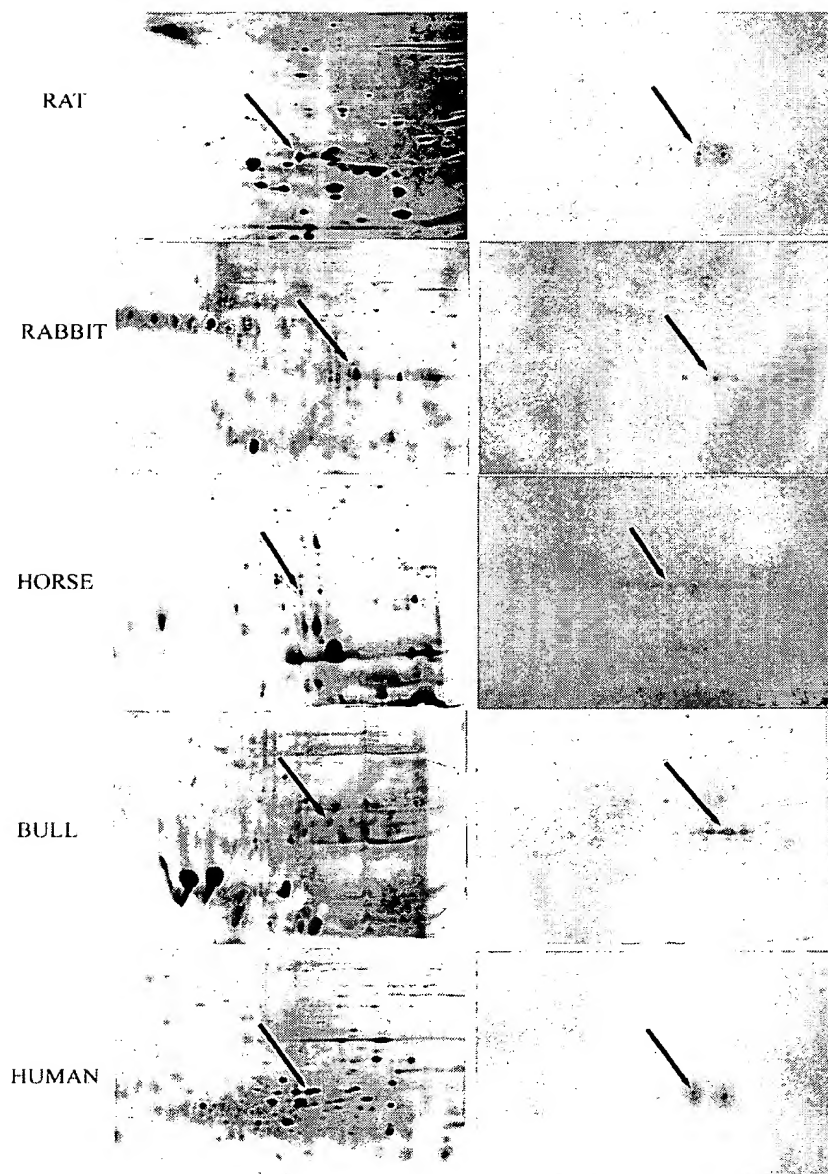
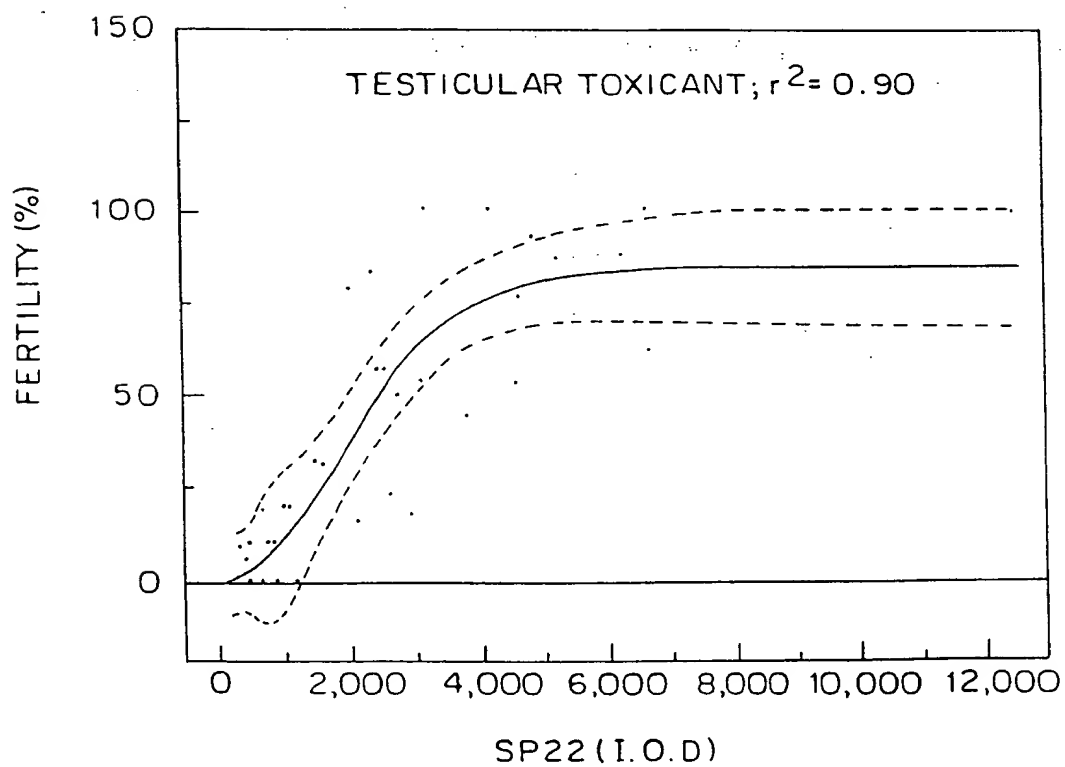
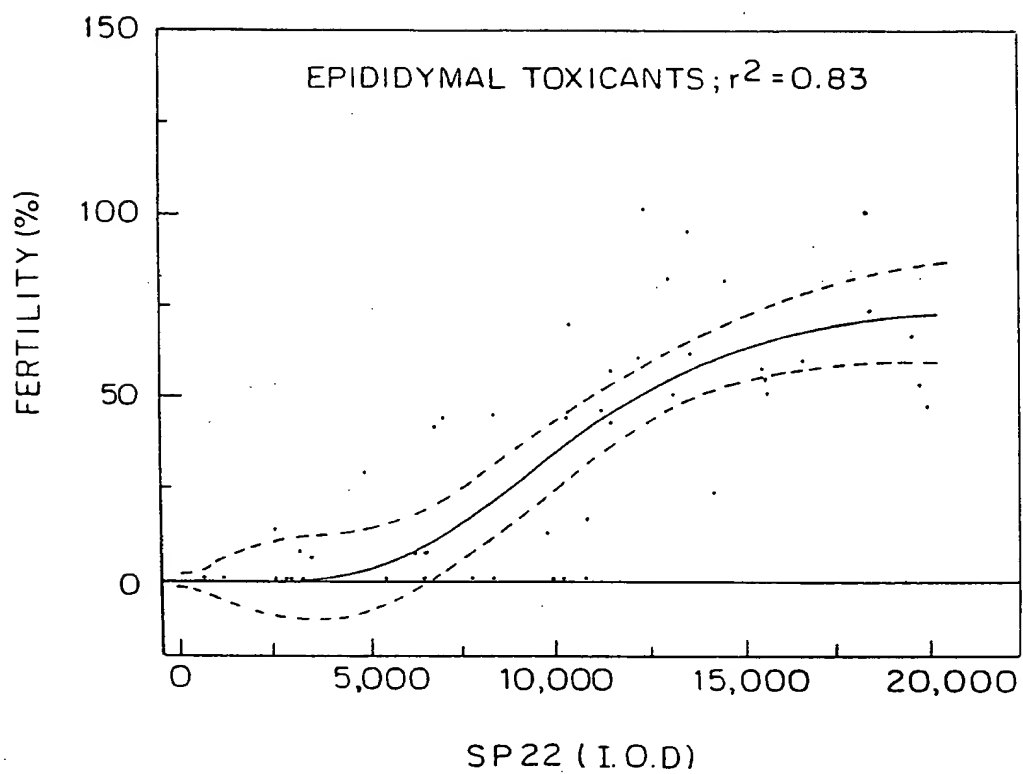
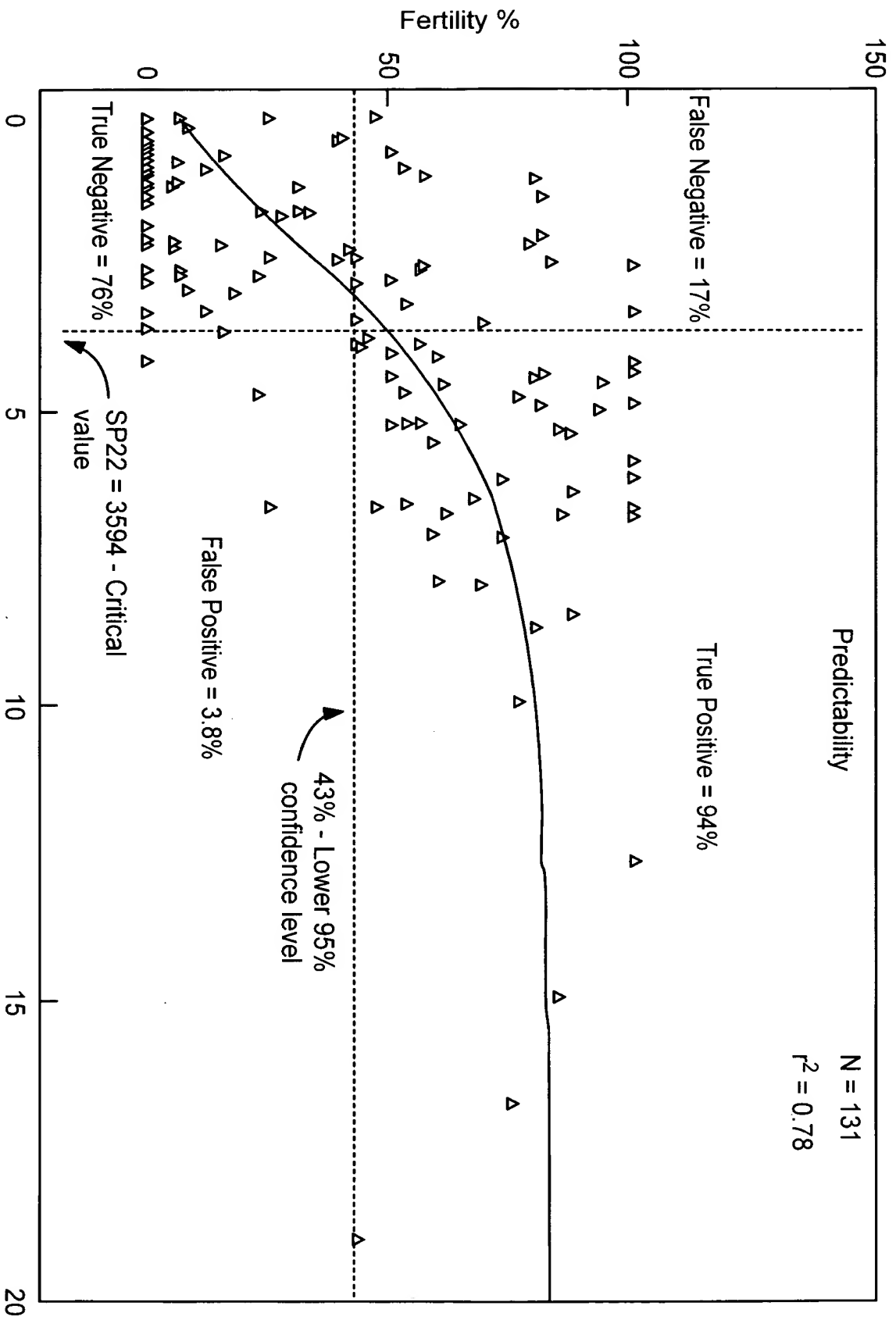


FIG. 6





SP22IOD x 10<sup>3</sup>  
**FIG. 7**

FIG. 8-1
FIG. 8-2
FIG. 8-3

FIG. 8

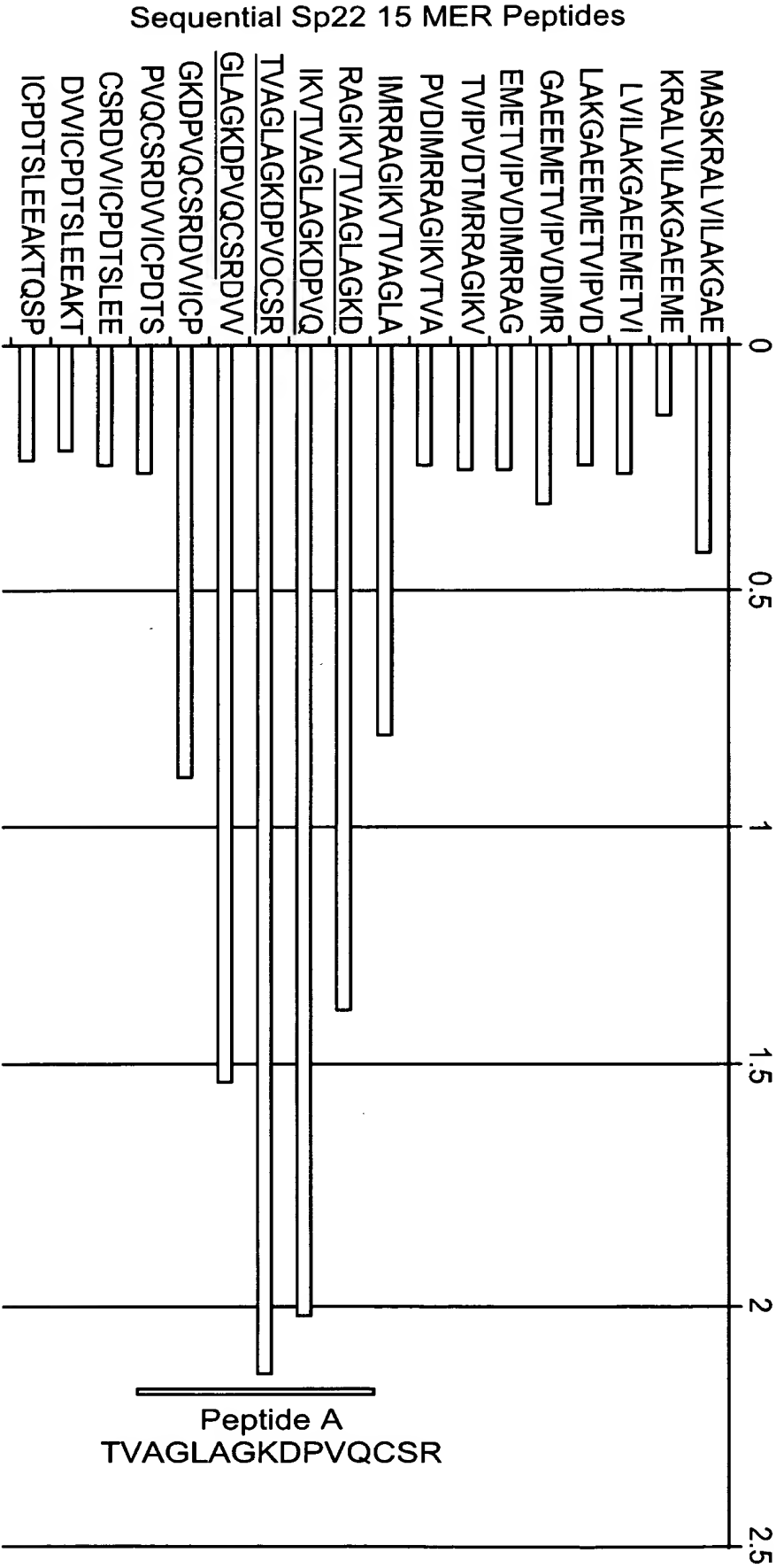


FIG. 8-1



Sequential Sp22 15 MER Peptides

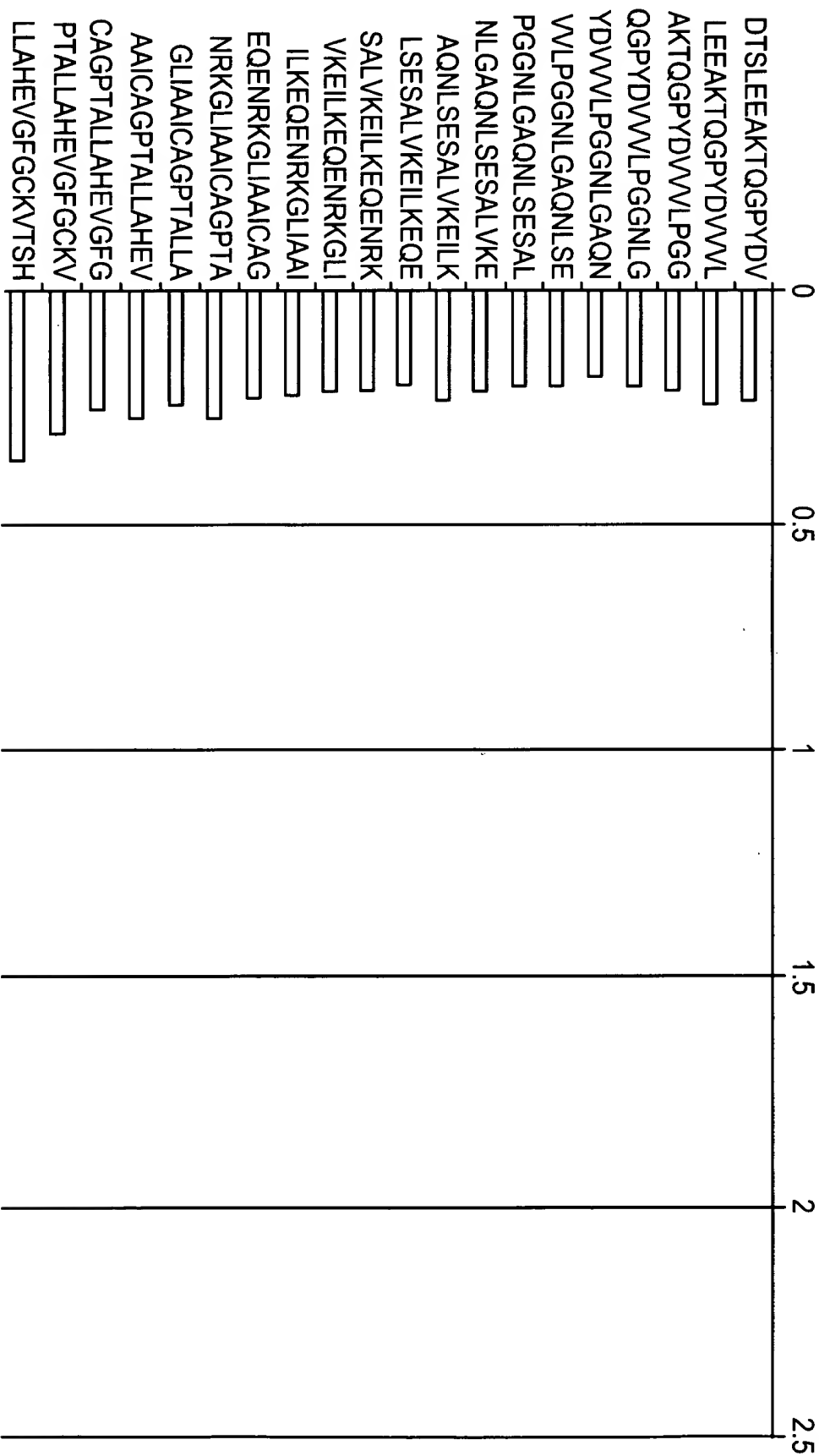


FIG. 8-2

Sequential Sp22 15 MER Peptides

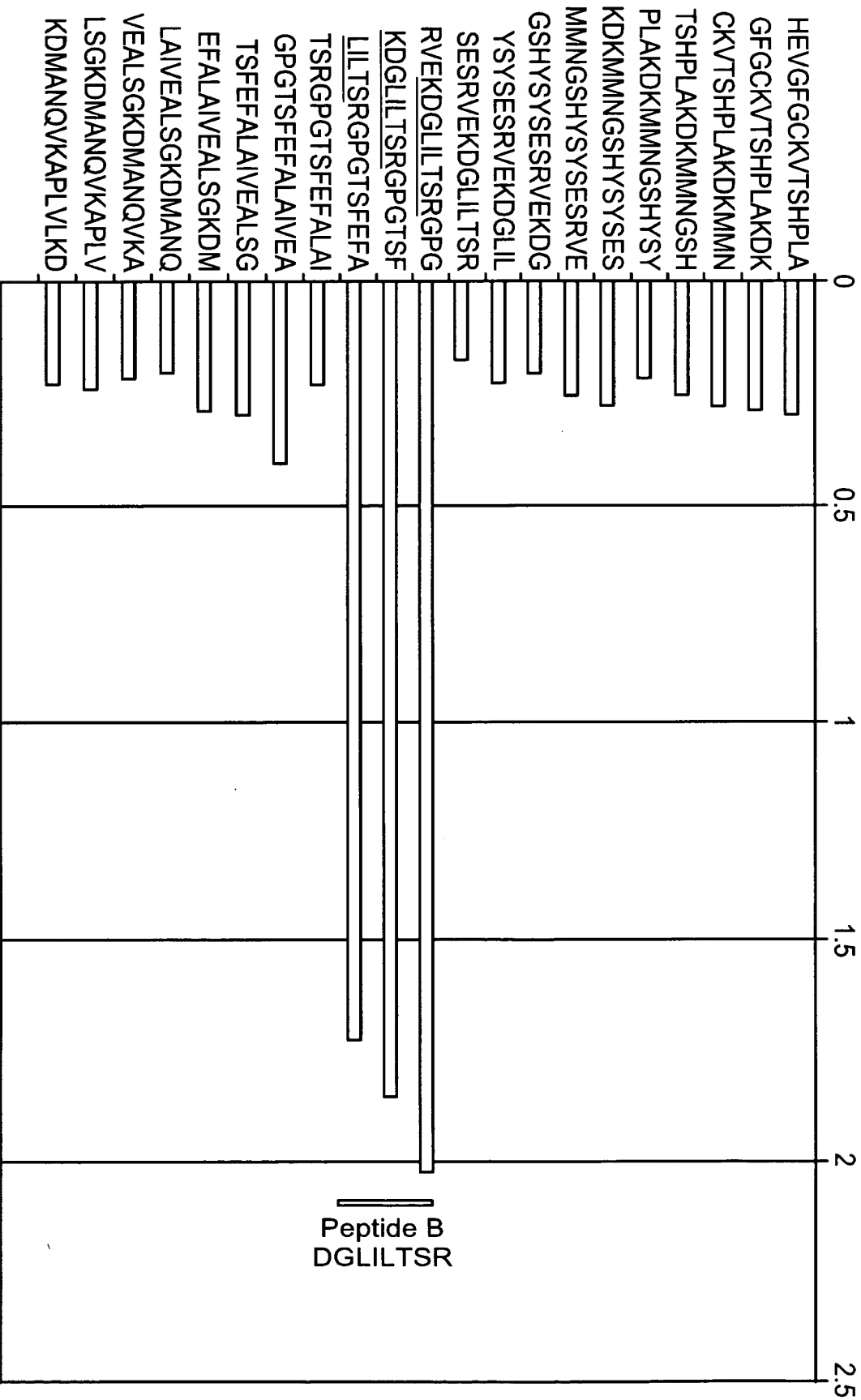
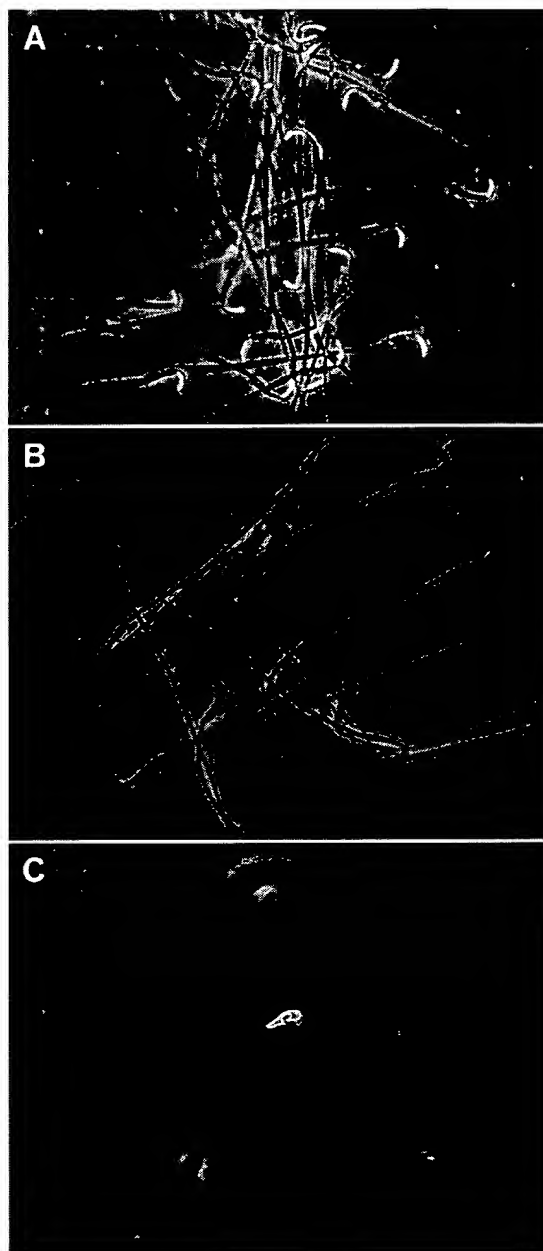


FIG. 8-3

**Fig. 9**



**Fig. 10**

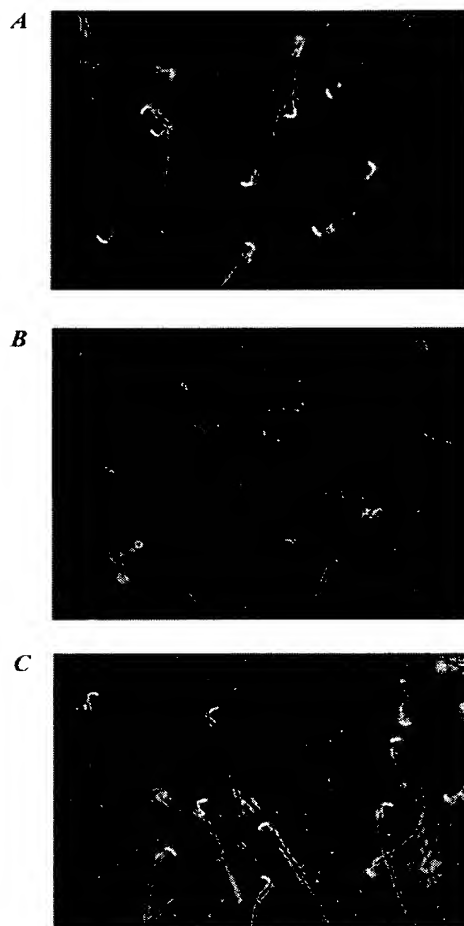
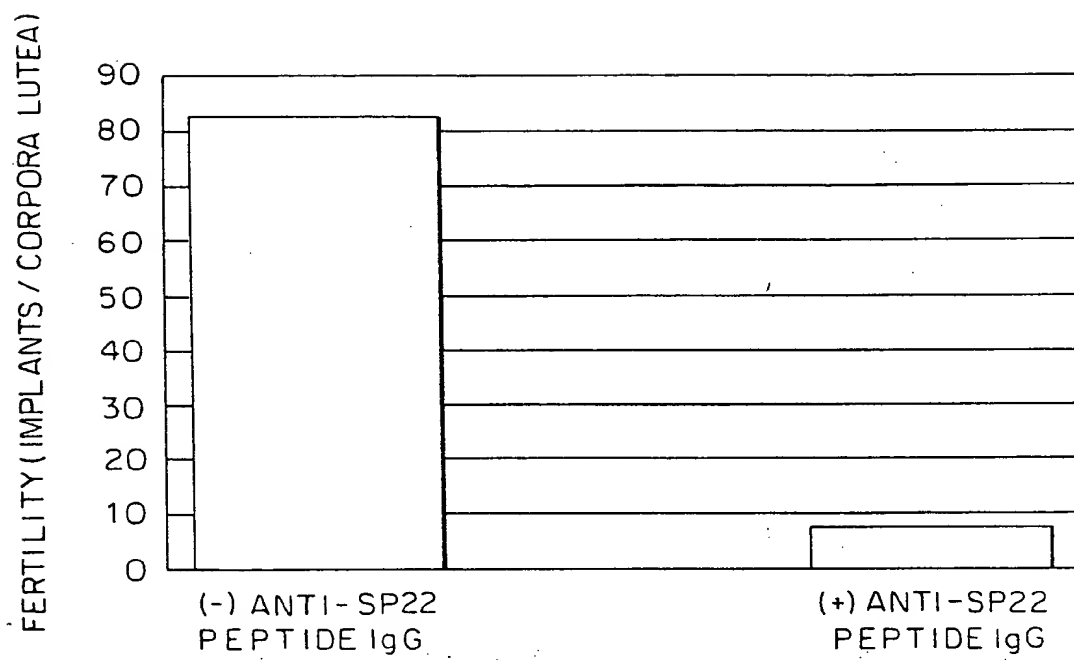


FIG. 11



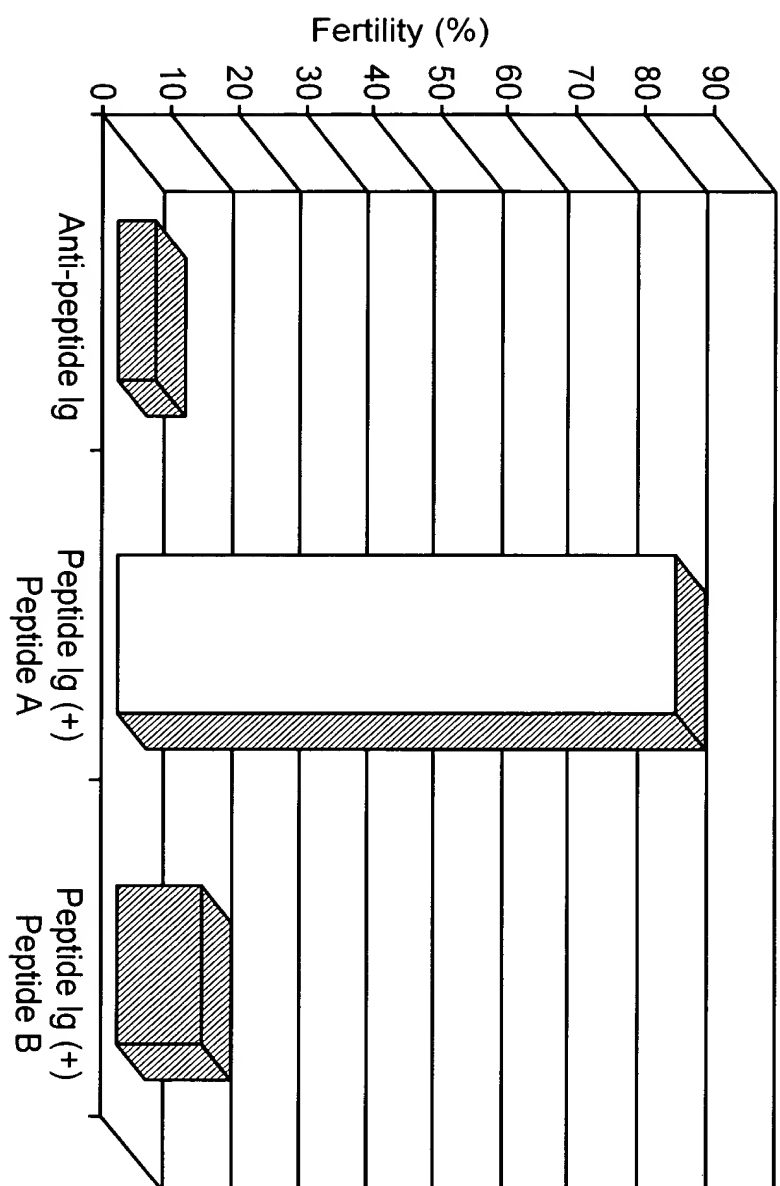


FIG. 12

FIG. 13-1
FIG. 13-2
FIG. 13-3

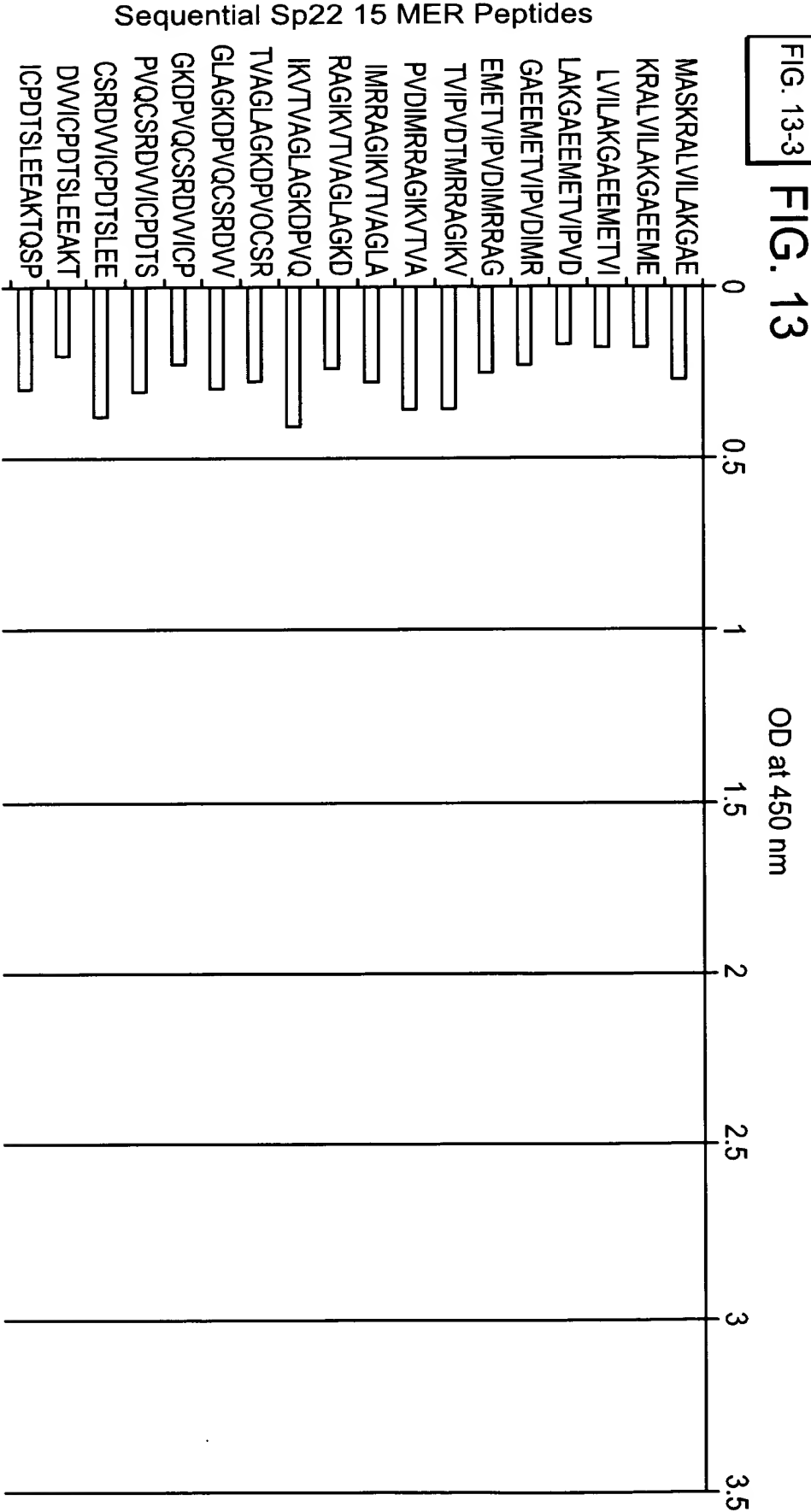


FIG. 13-1

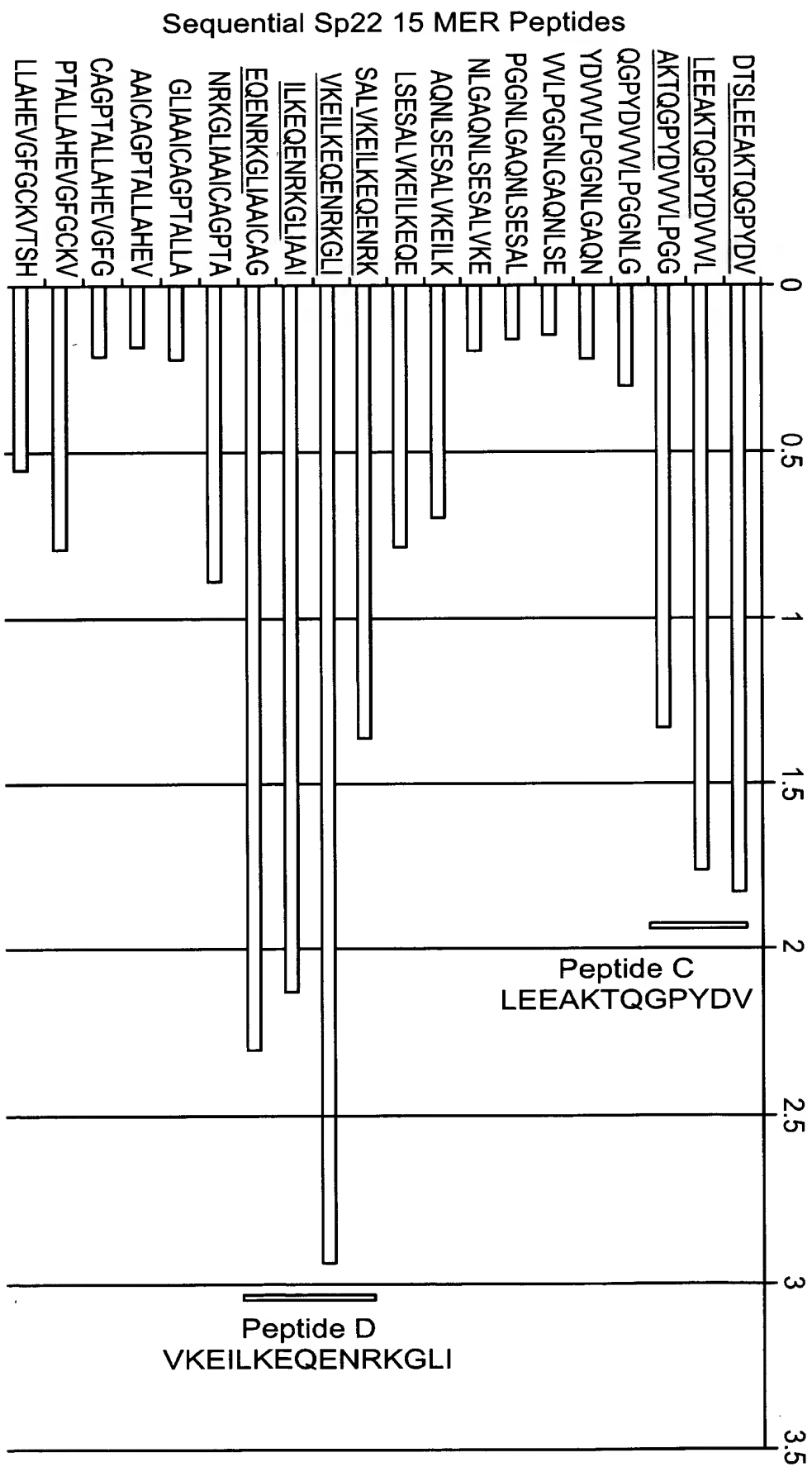


FIG. 13-2



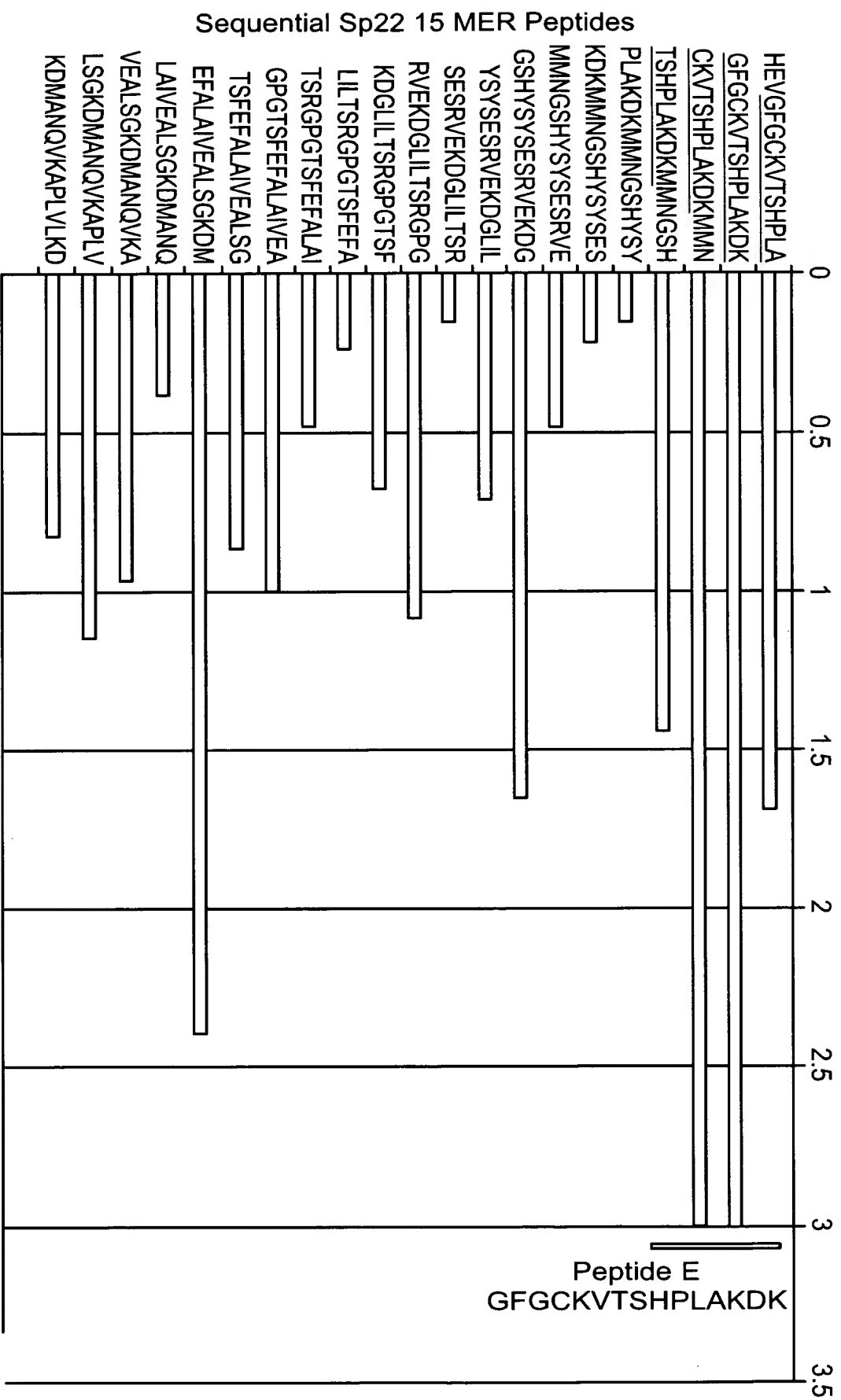


FIG. 13-3

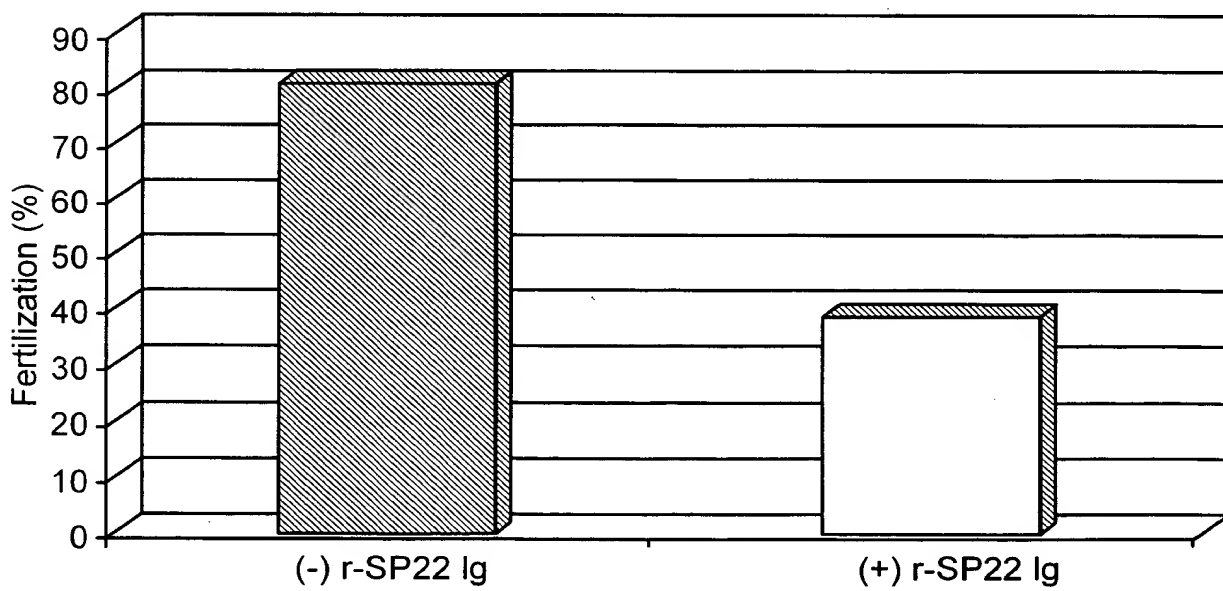
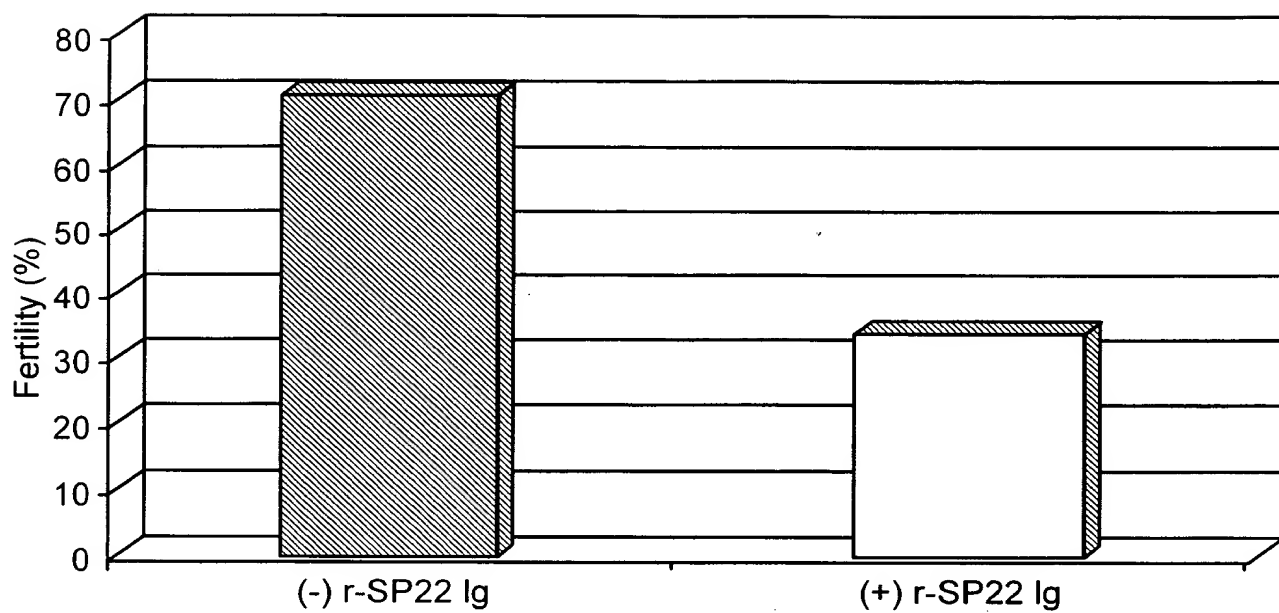


FIG. 14

FIG. 15

1	xxatggcatccaaaagagctctggtcatc	66
1	X X X X X X X X X X X X X M A S K R A L V I	22
67	ctagccaaaggagcagaggagatggagacagtgattcctgtggacatcatgcggcgagctgggatt	132
23	L A K G A E E M E T V I P V D I M R R A G I	44
133	aaagtcaccgttgcaggcttggtctgggaaggacccccgtgcagtgtagccgtgatgtagtgtttgt	198
45	K V T V A G L A G K D P V Q C S R D V V I C	66
199	ccggataccagtcctggaagaagcaaaaaacacagggaccatac gatgtggttgtttcttcaggagga	264
67	P D T S L E E A K T Q G P Y D V V V L P G G	88
265	aatctgggtgcacagaacttatctgagtcggctttggtgaaggagatcctcaaggagcaggagAAC	330
89	N L G A Q N L S E S A L V K E I L K E Q E N	110
331	aggaagggcctcatagctgccatctgtgcgggtcctacggccctgctggctcacgaagtaggcttt	396
111	R K G L I A A I C A G P T A L L A H E V G F	132
397	ggatgcaaggttacatcgcacccattggctaaggacaaaatgatgaacggcagtcactacagctac	462
133	G C K V T S H P L A K D K M M N G S H Y S Y	154
463	tcagagagccgtgtggagaaggacggcctcctcctcaccagccgtgggcctgggaccagcttcogag	528
155	S E S R V E K D G L I L T S R G P G T S F E	176
528	tttgcgctggccattgttgaggcactcagtggaaggacatggctaaccaagtgaaggccccgctt	594
177	F A L A I V E A L S G K D M A N Q V K A P L	198
595	gttctcaaagactagagagcccaagccctggaccctggacccccaggctgagcaggcatttgaagc	660
199	V L K D *	202
661	ccactagagagaccacagcccagtgaaacctggcatttgaagccactagtgtgtccacagcccagt	726
727	gaacctcaggaactaacgtgtgaagtagcccgctgctcaggaatctcgccctggctctgtactatt	792
793	ctgagccttgctagtagaataaacagttccccaaagctc	830

FIG. 16

1 gctgtgcagagccgtctggcaggggtgacctcctaaagggatattccatctttattaatcattag 65  
 66 tagtgtgggtcagagacttagcaccattgggtctcccccaacctgggtccagacatttcagcagttta 130  
 131 tcggaacagcaacaacagcaacaaaaccttcaaaatttacaagtctttaagaaatagaaATGgca 195  
 1 M A 2  
 196 tccaaaagagctctgggtcatcctagccaaaggagcagaggagatggagacagtgattcctgtgga 260  
 3 S K R A L V I L A K G A E E M E T V I P V D 24  
 261 caccatgcggcgagctgggattaaagtcaccggttgaggcttggtgggaaggaccccgtgcagt 325  
 25 I M R R A G I K V T V A G L A G K D P V Q 45  
 326 gtagccgtgatgtagtgatttgtccggataaccagtctggaagaagcaaaaacacagggaccatac 390  
 46 C S R D V V I C P D T S L E E A K T Q G P Y 67  
 391 gatgtgggtgttcttccaggaggaaatctgggtgcacagaacttatctgagtcgggctttggtgaa 455  
 68 D V V V L P G G N L G A Q N L S E S A L V K 89  
 456 ggagatcctcaaggagcaggagaacaggaagggcctcatagctgccatctgtgcgggtcctacgg 520  
 90 E I L K E Q E N R K G L I A A I C A G P T 110  
 521 ccctgctgggtcacgaagtaggctttggatgcaaggttacatcgcacccattggctaaggacaaa 585  
 111 A L L A F E V G F G C K V T S H P L A K D K 132  
 586 atgatgaacggcagtcactacagctactcagagagccgtgtggagaaggacggcctcatcctcac 650  
 133 M M N G S H Y S Y S E S R V E K D G L I L T 154  
 651 cagccgtgggcctgggaccagcttcgagtttgcgctggccattgtggaggcactcagtggcaagg 715  
 155 S R G P G T S F E F A L A I V E A L S G K 175  
 716 acatggctaaccaagtgaaggccccgcttgttctcaaagacTAGagagcccaagccctggaccct 780  
 176 D M A N Q V K A P L V L K D 189  
 781 ggacccccaggctgagcaggcattggaagcccactagtgtgtccacagcccagtgaacctggcat 845  
 846 tggaagcccactagtgtgtccacagcccagtgaacctcaggaactaacgtgtgaagtagcccgct 910  
 911 gctcaggaatctcgccctggctctgtactattctgagccttgctagtagaataaacagttcccca 975